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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,558	06/24/2005	Masashi Otsuki	Q88776	5353
23373 7590 06/02/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER WEINER, LAURA S				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
06/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/540,558

**Applicant(s)**

OTSUKI ET AL.

**Examiner**

/Laura S. Weiner/

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CS-100)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 6-24-05: 1-30-07

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Formula (I), where all R1 are halogen, X is represented by formula (IA) and both R2 are a monovalent substituent and Y is oxygen in the reply filed on 5-18-09 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claim 4 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5-18-09.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-2, 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Angell et al. (5,824,433).

Angell et al. teaches in column 2, an electrolyte comprising  $\text{Cl}_3\text{PNSO}_2\text{C}_2$  or a phospho-compound having the formula (II) which is  $\text{XXXP}=\text{N}-\text{R}$  where X is a halide and R is  $-\text{P}(\text{O})\text{X}_2$  creating:  $\text{Cl}_3-\text{P}=\text{N}-\text{P}(\text{O})\text{Cl}_2$  or R is a 1-6 carbon alkyl group creating  $\text{Cl}_3\text{PNCH}_3$ . Angell et al teaches in column 6, Example 8, a battery comprising a Li foil anode, a cathode comprising  $\text{LiMn}_2\text{O}_4$  and an electrolyte comprising  $\text{LiAlCl}$  dissolved in  $\text{Cl}_3\text{PNSO}_2\text{Cl}$ .

5. Claims 1- 3, 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Otsuki et al. (6,955,867).

Otsuki et al. teaches a secondary cell comprising a positive electrode, a negative electrode and an electrolyte comprising 2-20% by volume of a phosphazene derivative and a support salt. Otsuki et al teaches in column 8, a chain phosphazene derivative represented by formula (1) where  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  represent monovalent substituents or halogen such as a fluorine, a chlorine, a bromine, and the like; X represents at least one of carbon, silicon, nitrogen, phosphorus, oxygen, sulfur, etc.

and Y1, Y2 and Y3 represent single bonds. Otsuki et al. teaches in column 9, that X can be a group such as shown as group (A), group (B), group (C) where group A is  $Y5R5Y6R6P=Z$  where R5 and R6 represent monovalent substituents or a halogen and Y5 and Y6 represent a single bond and Z can be oxygen.

6. Claims 1-3, 5-10 are rejected under 35 U.S.C. 102(b)(a) as being anticipated by Otsuki et al. (WO 0186746/ EP 1 289 044).

Otsuki et al. ('044) teaches on page 3, [0021-0023], a secondary cell comprising a positive electrode, a negative electrode and an electrolyte comprising a phosphazene derivative and a support salt. Otsuki et al. teaches on page 7, [0064], that 3-50 vol% of a phosphazene derivative is used. Otsuki et al teaches on page 9, a chain phosphazene derivative represented by formula (1) where R1, R2 and R3 represent monovalent substituents or halogen; X represents at least one of carbon, silicon, nitrogen, phosphorus, oxygen, sulfur, etc. and Y1, Y2 and Y3 represent single bonds. Otsuki et al. teaches on page 10, that X can be a group such as shown as group (A), group (B), group (C) where group A is  $Y5R5Y6R6P=Z$  where R5 and R6 represent monovalent substituents or a halogen and Y5 and Y6 represent a single bond and Z can be oxygen.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Laura S. Weiner/ whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura S Weiner/  
Primary Examiner  
Art Unit 1795

May 29, 2009